Navy Region Southwest

CONVERSION TECHNOLOGY PROJECT

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JUNE 2010

Report Documentation Page

Form Approved
OMB No. 0704-0188

1. REPORT DATE	2. REPORT TYPE	3. DATES COVERED
JUN 2010		**00-00-2010 to 00-00-2010**

4. TITLE AND SUBTITLE	5a. CONTRACT NUMBER
Conversion Technology Project	5b. GRANT NUMBER
	5c. PROGRAM ELEMENT NUMBER
6. AUTHOR(S)	5d. PROJECT NUMBER
	5e. TASK NUMBER
	5f. WORK UNIT NUMBER
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) **Navy Region Southwest,937 North Harbor Drive ,San Diego,CA,92132-0058**	8. PERFORMING ORGANIZATION REPORT NUMBER
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)	10. SPONSOR/MONITOR'S ACRONYM(S)
	11. SPONSOR/MONITOR'S REPORT NUMBER(S)

12. DISTRIBUTION/AVAILABILITY STATEMENT
Approved for public release; distribution unlimited

13. SUPPLEMENTARY NOTES
Presented at the NDIA Environment, Energy Security & Sustainability (E2S2) Symposium & Exhibition held 14-17 June 2010 in Denver, CO.

14. ABSTRACT

15. SUBJECT TERMS

16. SECURITY CLASSIFICATION OF:			17. LIMITATION OF ABSTRACT	18. NUMBER OF PAGES	19a. NAME OF RESPONSIBLE PERSON
a. REPORT **unclassified**	b. ABSTRACT **unclassified**	c. THIS PAGE **unclassified**	**Same as Report (SAR)**	**7**	

Sustainable Solid Waste Program
MISSION, VISION, GUIDING PRINCIPALS

- **MISSION: Provide policy, guidance, and direction to *institutionalize* and execute sustainable solid resource and waste management practices throughout NRSW for all activities that generate non-hazardous solid waste**

Holistic Approach that Emphasizes Resource / Commodity Management
Develop Management Approaches for Different Navy Communities
Promote a Culture of Resourcefulness vs. Wastefulness

- **VISION: By 2012, NRSW will have a fully institutionalized Sustainable Solid Waste Management Program that is efficiently and effectively executed**

Move towards *"SSW's 2020 Vision – NOTHING WASTED"*

- **GUIDING PRINCIPALS: Use RCRA definition of non-hazardous solid waste and DoD's solid waste hierarchy of: Reduce, Reuse, Recycle, Disposal only as a last resort**

Leadership has a role to promote a culture of resourcefulness versus wastefulness

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- **Miramar landfill scheduled to close 2019**
  - Estimated $8M - $12M annual increase in Navy's refuse disposal costs
- **Navy Environmental Sustainability Development to Integration (NESDI) R&D funding secured for conversion technology feasibility study**
  - Study began February 2008 and continues with an expected draft in July
  - Broad Agency Agreement to partner with UCLA for conducting the feasibility study
    - Part of UCLA's Engineering and Technology Dept's Recycling / Municipal Solid Waste Management Certification Program to establish case study and benchmarking for the State of CA
    - Study will identify optimal conversion technology to produce clean energy from Navy generated solid waste
    - Developing methodology for CT approach to SSW Mgt and Energy generation
    - NESDI requirement to be "off-the-shelf" for use Navy-wide
- **"ECO Park" approach to maximize waste value and realize Energy goals**
  - MRF first – CA AB 222
  - Waste Derived Fuel (WDR) management to maximize value of wasteshed
  - Combination of several types of technologies
  - **Planned to enhance meeting Navy energy goals**

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- **Extensive waste characteristic study (Navy & surrounding municipalities) complete**
- **Partnering with municipalities the project becomes more economically feasible.**
  - larger plants, supporting over 1,000 tons per day, have greater returns on investment
  - More welcoming for outside investment opportunities
- **Environmental Justice study complete**
  - will be incorporated into the final report in July
- Comprehensive Traffic Study **complete**
- **Public Outreach beginning SEP 10**
  - Modeled after Los Angeles' "RENEW LA" Initiatives
  - Public as stake holders
  - Start early

FEASIBILITY STUDY Began Sept 2009

Phase I: Waste Characterization

- What is available as wasteshed
- How much? BTU's?
- Partnership opportunity with other municipalities, waste haulers

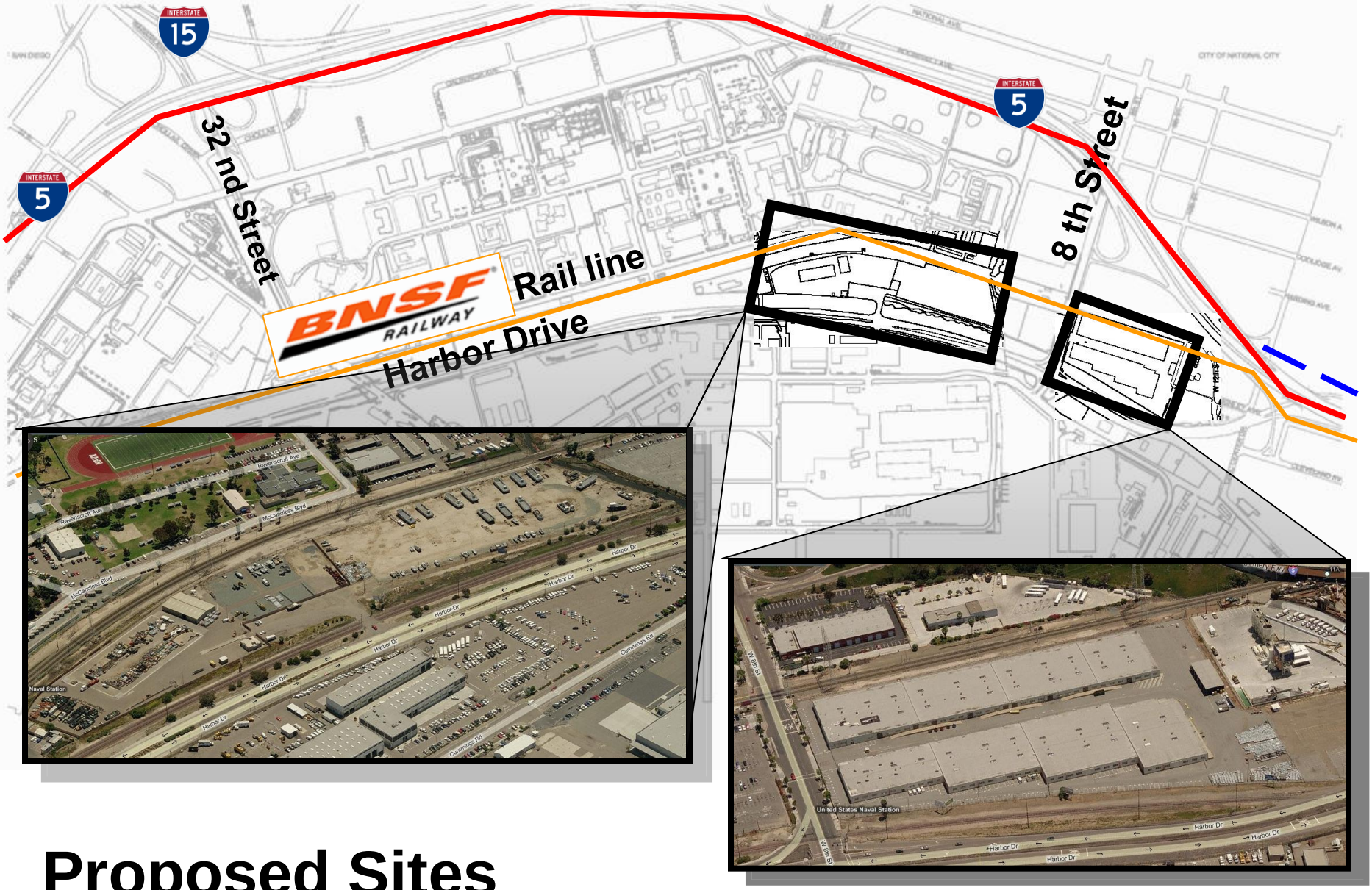
Phase 2: Technology Review

- What technology is available to convert local wasteshed
- Size necessary for ROI
- Real Estate and land use requirements per technology
- NEPA / CEQA requirements identified
- Energy Joint Venture or Enhanced Use Lease Project
  - Identify Renewable Energy needs
    - Electricity?
    - Ethanol?
    - Syn gas?
  - Municipal Recovery Facility (MRF)
    - MRF first evaluation

Phase 3: Project Scenarios and Site Evaluation

SUPPORT FROM Naval Base San Diego

- **Identified sites on NBSD**
  - can include both a sorting area and the conversion technologies
  - 28+ acres
  - No gated entrance
    - Leaves open potential to partner with local communities for wasteshed for project to reach full ROI potential
  - Rail access
  - Major Highway access
- **Planning and land use expertise on CFT**
  - **“urban planning” concept**
- **Traffic study input into feasibility study**
- **Potential for community outreach to National City, local waste haulers, other municipalities**



Proposed Sites

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